| 2.d.5         | Illusions — operational visual scenes which portray   |            |            |          | X             |
|---------------|---|------------|------------|----------|---------------|
|               | representative physical relationships known to cause landing  |            |            |          |               |
|               | illusions, for example short runways, landing approaches over   |            |            |          |               |
|               | water, uphill or downhill runways, rising terrain on the approach   |            |            |          |               |
|               | path and unique topographic features.   |            |            |          |               |
|               | Note.— Illusions may be demonstrated at a generic airport or at   |            |            |          |               |
|               | a specific airport.   |            |            |          |               |
| 2.e           | Correlation with airplane and associated equipment.   |            |            |          |               |
| 2.e.1         | Visual cues to relate to actual airplane responses.   | X          | X          | X        | X             |
| 2.e.2         | Visual cues during take-off, approach and landing.  | 1          |            |          | r             |
| 2.e.2.a       | Visual cues to assess sink rate and depth perception during landings.   |            | X          | X        | X             |
| 2.e.2.b       | Visual cueing sufficient to support changes in approach path by   | X          | X          | X        | X             |
|               | using runway perspective. Changes in visual cues during take-off,   |            |            |          |               |
|               | approach and landing should not distract the pilot.   |            |            |          |               |
| 2.e.3         | Accurate portrayal of environment relating to airplane attitudes.   | X          | X          | X        | X             |
| 2.e.4         | The visual scene must correlate with integrated airplane systems,   |            |            | X        | X             |
|               | where fitted (e.g. terrain, traffic and weather avoidance systems   |            |            |          |               |
|               | and HUD/EFVS).  |            |            |          |               |
| 2.e.5         | The effect of rain removal devices must be provided.  |            |            | X        | X             |
| 2.f           | Scene quality.  |            |            |          |               |
| 2.f.1         | Quantization.   | ı          |            |          |               |
| 2.f.1.a       | Surfaces and textural cues must be free from apparent   |            |            | X        | X             |
| 2011          | quantization (aliasing).  | <b>X</b> 7 | *7         |          |               |
| 2.f.1.b       | Surfaces and textural cues must not create distracting  | X          | X          |          |               |
| 2.62          | quantization (aliasing).  |            |            | 37       | <b>X</b> 7    |
| 2.f.2         | System capable of portraying full color realistic textural cues.  | 7.         | <b>X</b> 7 | X        | X             |
| 2.f.3         | The system light points must be free from distracting jitter,   | X          | X          | X        | X             |
| 2.f.4         | smearing or streaking.  |            |            | v        | X             |
| 2.1.4         | System capable of providing representative focus effects that simulate rain (e.g. reduced visibility and object resolution in the |            |            | X        | A             |
|               | out the window view as a result of rain).   |            |            |          |               |
| 2.f.5         | System capable of providing light point perspective growth (e.g.  |            |            | X        | X             |
| 2.1.3         | relative size of runway and taxiway edge lights increase as the   |            |            | Λ        | $  \Lambda  $ |
|               | lights are approached).   |            |            |          |               |
| 2.g           | Environmental effects.  |            |            | <u> </u> |               |
| 2.g.1         | The displayed scene must correspond to the appropriate surface  |            |            | X        | X             |
| <b>-</b> -9-1 | contaminants and include runway lighting reflections for wet,   |            |            | **       | **            |
|               | partially obscured lights for snow, or suitable alternative effects.  |            |            |          |               |
| 2.g.2         | Special weather representations which include the sound, motion   |            |            | X        | X             |
| <b>g</b>      | and visual effects of light, medium and heavy precipitation near a  |            |            |          |               |
|               | thunderstorm on take-off, approach and landings at and below an   |            |            |          |               |
|               | altitude of 600 m (2 000 ft) above the airport surface and within a   |            |            |          |               |
|               | radius of 16 km (10 sm) from the airport.   |            |            |          |               |
| 2.g.3         | One airport with a snow scene to include terrain snow and snow-   |            |            | X        | X             |
|               | covered taxiways and runways.   |            |            |          |               |
| 2.g.4         | In-cloud effects such as variable cloud density, speed cues and   |            |            | X        | X             |
|               | ambient changes should be provided.   |            |            |          |               |
| 2.g.5         | The effect of multiple cloud layers representing few, scattered,  |            |            | X        | X             |
|               | broken and overcast conditions giving partial or complete   |            |            |          |               |